What is claimed is:

1. An aptamer-toxin conjugate therapeutic agent comprising a targeting moiety conjugated to a cytotoxic moiety.

2. The therapeutic agent of claim 1 wherein said targeting moiety is an aptamer.

3. The therapeutic agent of claim 1 wherein said targeting moiety is a nucleic acid sensor molecule.

4. The therapeutic agent of claim 2 wherein said cytotoxic moiety is selected from the group consisting of a cytotoxic peptide, a cytotoxic protein, a small molecule chemotherapeutic agent, and a radioisotope therapeutic molecule.

5. The therapeutic agent of claim 3 wherein said cytotoxic moiety is selected from the group consisting of a cytotoxic peptide, a cytotoxic protein, a small molecule chemotherapeutic agent, and a radioisotope therapeutic molecule.

6. The therapeutic agent of claim 4, wherein said targeting moiety is conjugated to said cytotoxic moiety by a covalent bond.

7. The therapeutic agent of claim 5, wherein said targeting moiety is conjugated to said cytotoxic moiety by a covalent bond.

8. The therapeutic agent of claim 4 wherein said targeting moiety is conjugated to said cytotoxic moiety by a non-covalent bond.

9. The therapeutic agent of claim 5 wherein said targeting moiety is conjugated to said cytotoxic moiety by a non-covalent bond.

10. An aptamer-drug conjugate comprising one or more aptamers and a drug linked by a linker and having the formula: $(aptamer)_n$ -- linker -- $(drug)_m$, wherein n is between 1 and 10 and m is between 0 and 20.

11. The aptamer-drug conjugate of claim 10, wherein at least one of the one or more aptamers is a tumor-cell targeting aptamer.

12. The aptamer-drug conjugate of claim 10, wherein at least one of the one or more aptamers is specific for a target selected from the group consisting of PSMA, PSCA, e-selectin, an ephrin, ephB2, cripto-1, TENB2 (TEMFF2), ERBB2 receptor (HER2), MUC1, CD44v6, CD6, CD19, CD20, CD22, CD23, CD25, CD30, CD33, CD56, IL-2 receptor, HLA-DR10β subunit, EGFRvIII, MN antigen, caveolin-1 and nucleolin.

13. The aptamer-drug conjugate of claim 10, wherein the drug is a cytotoxin.

14. The aptamer-drug conjugate of claim 10, wherein the drug is selected from the group consisting of a calicheamicin, a maytansinoid, a vinca alkaloid, a cryptophycin, a tubulysin, dolastatin-10, dolastatin-15, auristatin E, rhizoxin, epothilone B, epithilone D, taxoids and variants thereof.

15. The aptamer-drug conjugate of claim 10, wherein the drug is selected from the group consisting of Nac-γ-DMH, Nac-γ-NHS, maytansine, May-NHS, desacetyl vinblastine 3-carboxhydrazide (DAVCH), desacetyl vinblastine 4-O-succinate (DAVS), cryptophycin-52, and crypthophycin-52-amine (Cryp-NH2).

16. The aptamer-drug conjugate of claim 10, wherein the linker comprises one or more nucleophilic moieties, one or more electrophilic moieties or combinations thereof.

17. The aptamer-drug conjugate of claim 10, wherein the linker is selected from the group consisting of a Boc-protected amine, a Boc-protected amine on a heterobifunctional

linker, a nucleophilic dendrimer, an electrophilic dendrimer and an electrophilic comb polymer.

18. The aptamer-drug conjugate of claim 10, wherein the linker is selected from the group consisting of Boc-NH2-PEG-NHS, an erythritol dendrimer, an octa-polyethylene glycol dendrimer and comb polymer.